

Abstract

A system and related process to enable control of photolithographic pattern features on a structure having one or more severe non-flat topologies. The system includes an analysis of the Depth of Focus associated with photolithographic equipment and a photoresist film applied to the structure. From that determination a range of layout dimension of the topologies is identified accordingly and incorporated into the fabrication of such topologies. A conformal layer of material is then applied to the formed structure including the determined topologies to effectively substantially close up the topologies prior to application of the photoresist film. The system is suitable for use with any structure having severe topologies and photolithographic limitations including, for example, in the fabrication of micro-electro mechanical systems.